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Indian Standard

SPECIFICATION FOR SPOKE WRENCHES FOR BICYCLE AND MOPED

- 1. Scope Covers the dimensions and other requirements for spoke wrenches used for tightening or loosening of the spoke nipples of bicycles and mopeds.
- 2. Types Shall be of two types depending on number of grooves and sides.

Type A - Six-grooved single side

Type B - Four-grooved both sides

3. Dimensions - Shall be as given in Fig. 1 and 2.

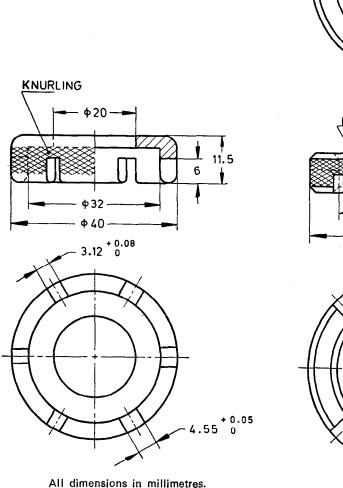
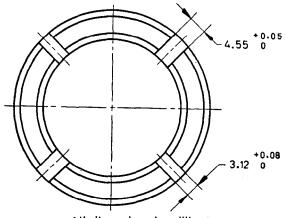


FIG. 1 DIMENSIONS FOR SPOKE WRENCH, TYPE A

4.55 0 4.



All dimensions in millimetres.

FIG. 2 DIMENSIONS FOR SPOKE WRENCH, TYPE B

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- 3.1 Tolerances Tolerances on the untoleranced dimensions shall be in accordance with medium grade of IS: 2102 (Part I)-1980 'General tolerance for linear and angular dimensions (second revision)'.
- **4.** Material Wrenches shall be made from suitable steels meeting the requirements of hardness given in **6**.

5. Manufacture, Workmanship and Finish

- **5.1** The wrenches shall be free from burrs and defects, such as pitting, seams, and scales. The opposite grooves shall lie on the same axis. The circumferencial face of the wrench shall be knurled, in accordance with IS: 3403-1966 'Dimensions for knurling'.
- **5.2** Wrenches shall be given suitable anticorrosive treatment such as galvanising, painting or electroplating of nickel and chromium.
- 6. Hardness Hardness checked near the grooves shall be 35 HRC Min.
- 7. Sampling The procedure given in IS:2500 (Part I)-1973 'Sampling inspection table: Part 1 By attributes and by count of defects (*first revision*)' shall be followed for sampling inspection. The sampling plan for various characteristics shall be as given in 7.1.
- 7.1 For inspection of dimensions, hardness and workmanship and finish, sampling plan with Inspection Level IV and Acceptable Quality Level (AQL) of 4 percent as given in IS:2500 (Part I)-1973 shall be adopted.
- 8. Packing Individual types of wrenches shall be packed separately in waterproof paper and finally in cardboard boxes.
- 9. Marking Wrenches shall be punched with manufacturer's name/trade-mark and type, size of spoke nipples near each groove.
- 9.1 Certification Marking Details available with the Bureau of Indian Standards.

EXPLANATORY NOTE

While truing the rims of bicycles/mopeds; these types of wrenches are used for tightening/loosening of the bicycle/moped spoke nipples, conforming to IS:630-1982 'Bicycle spokes (plain) and nipples for spokes (second revision)'; and IS:8116-1976 'Moped spokes and nipples for spokes'. In the preparation of this standard considerable assistance has been taken from the details supplied by the manufacturers of this product.